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WHAT IS CLAIMED IS:

1. Process for the separation of dichlorobenzene mixtures containing m- and p-dichlorobenzene by extractive rectification comprising contacting the mixture with an extracting agent, separating components of the mixture into an m-dichlorobenzene- and p-dichlorobenzene-containing fraction and finally separating the extracting agent from one of the fractions obtained, characterized in that the extracting agent used is a phosphoric ester of the general formula (I)

$$\begin{array}{ccc}
O & II \\
R^1O & P - OR^3 \\
OR^2
\end{array} (I)$$

in which R¹, R² and R³ are identical or different and represent an aliphatic or cycloaliphatic alkyl or alkenyl radical, and R¹, R² and R³ together contain at least 3C and not more than 12 C atoms, or a mixture of different phosphoric esters of this type or a phosphine oxide of the general formula (II)

$$\begin{array}{c}
O \\
II \\
P - R^3 \\
R^2
\end{array} (II)$$

in which R^1 , R^2 and R^3 are identical or different and represent an aliphatic or cycloaliphatic alkyl or alkylene radical or hydrogen, and R^1 , R^2 and R^3 together contain at least 3C and not more than 12 C atoms, or a mixture of different phosphine oxides of this type or a mixture of said phosphoric esters and phosphine oxides.

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- Process according to Claim 1, characterized in that, in the formula

 (I) or (II) for the extracting agent, R¹, R² and R³ are identical or different and represent a radical selected from the group consisting of methyl, ethyl, n-propyl, isopropyl, n-butyl, tert-butyl, n-pentyl, and sec-butyl.
- 3. Process according to Claim 1, characterized in that the extracting agent used is triethyl phosphate, tripropylphosphine oxide or tributylphosphine oxide alone or as a mixture.
- 4. Process according to Claim 1, characterized in that the separation is carried out in a rectification column, wherein pressure at the top of the column is in the range of 5 to 100 hPa and pressure difference between the bottom of the column and the top of the column being 0 to 100 hPa and optionally the number of theoretical plates being 20 to 200.
- 5. Process according to Claim 4, characterized in that the pressure at the top of the column is 5 to 30 hPa and the pressure difference between the bottom of the column and the top of the column is 0 to 20 hPa and optionally the number of theoretical plates is 60 to 120.
 - 6. Process according to any of Claim 1, characterized in that weight ratio of mass flow of reflux to distillate is 1:1 to 20:1, in particular 3:1 to 8:1.
 - 7. Process according to Claim 1, characterized in that weight ratio of mass flow of feed of the extracting agent to feed of the m-dichlorobenzene and p-dichlorobenzene mixture is 2:1 to 40:1, in particular 6:1 to 12:1.

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- 8. Process according to Claim 1, characterized in that the separation of m- and p-dichlorobenzene and recovery of the extracting agent is carried out in a rectification column, with a side-stream column being connected to the rectification column via a vapour side-stream take-off for recovery of the extracting agent.
- Process according to Claim 1, characterized in that a melt crystallization for fine purification of the desired isomer, is provided downstream of the extractive rectification.
- A process for conducting extractive distillation comprising providing phosphoric esters and phosphine oxides, as extracting agents for the extractive rectification.
- 15 11. The process for conducting extractive distillation comprising providing phosphoric esters and phosphine oxides of the formulae (I) or (II) as recited in Claim 1, as extracting agents for the extractive rectification